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- (2) Maximum extractable nonvolatile fraction of 3 parts per million when extracted with n-heptane at 70 °C for 2 hours, using a volume-to-surface ratio of 2 milliliters per square inch.
- (3) Maximum extractable nonvolatile fraction of 6 parts per million when extracted with 10 percent (by volume) ethyl alcohol in distilled water at 70 °C for 2 hours, using a volume-to-surface ratio of 2 milliliters per square inch.
- (d) The provisions of this section are not applicable to 4,4'-isopropylidene-diphenol-epichlorohydrin resins listed in other sections of subchapter B of this chapter.

§ 177.1460 Melamine-formaldehyde resins in molded articles.

Melamine-formaldehyde resins may be safely used as the food-contact surface of molded articles intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting, or holding food in accordance with the following prescribed conditions:

- (a) For the purpose of this section, melamine-formaldehyde resins are those produced when 1 mole of melamine is made to react with not more than 3 moles of formaldehyde in water solution.
- (b) The resins may be mixed with refined woodpulp and the mixture may contain other optional adjuvant substances which may include the following:

| List of substances | Limitations |
|--|--|
| Colorants used in accordance with § 178.3297 of this chapter . | |
| Dioctyl phthalate | For use as lubricant. |
| Hexamethylenetetramine | For use only as polymerization reaction control agent. |
| Phthalic acid anhydride | Do. |
| Zinc stearate | For use as lubricant. |

(c) The molded melamine-formaldehyde articles in the finished form in which they are to contact food, when extracted with the solvent or solvents characterizing the type of food and under the conditions of time and temperature as determined from tables 1 and 2 of §175.300(d) of this chapter, shall yield net chloroform-soluble ex-

tractives not to exceed 0.5 milligram per square inch of food-contact surface.

[42 FR 14572, Mar. 15, 1977, as amended at 56 FR 42933, Aug. 30, 1991]

§ 177.1480 Nitrile rubber modified acrylonitrile-methyl acrylate copolymers.

Nitrile rubber modified acrylonitrilemethyl acrylate copolymers identified in this section may be safely used as components of articles intended for food-contact use under conditions of use D, E, F, or G described in table 2 of §176.170(c) of this chapter, subject to the provisions of this section.

- (a) For the purpose of this section, nitrile rubber modified acrylonitrilemethyl acrylate copolymers consist of basic copolymers produced by the graft copolymerization of 73–77 parts by weight of acrylonitrile and 23–27 parts by weight of methyl acrylate in the presence of 8–10 parts by weight of butadiene-acrylonitrile copolymers containing approximately 70 percent by weight of polymer units derived from butadiene.
- (b) The nitrile rubber modified acrylonitrile-methyl acrylate basic copolymers meet the following specifications and extractives limitations:
- (1) Specifications. (i) Nitrogen content is in the range 16.5–19 percent as determined by Kjeldahl analysis.
- (ii) Intrinsic viscosity in acetonitrile at 25 °C is not less than 0.29 deciliter per gram as determined by ASTM method D1243-79, "Standard Test Method for Dilute Solution Viscosity of Vinyl Chloride Polymers," which is incorporated by reference. Copies may be obtained from the American Society for Testing Materials, 1916 Race St., Philadelphia, PA 19103, or may be examined at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC 20408.
- (iii) Residual acrylonitrile monomer content is not more than 11 parts per million as determined by gas chromatography.
- (iv) Acetonitrile-soluble fraction after refluxing the base polymer in acetonitrile for 1 hour is not greater than 95 percent by weight of the basic copolymers.